

Office Action Summary

Application No.

10/537,651

Applicant(s)

LINDALL ET AL.

Examiner

JAMES E. MCDONOUGH

Art Unit

1793

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) 7-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 17 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
- Paper No(s)/Mail Date _____

- 4) ☒ Interview Summary (PTO-413)
- Paper No(s)/Mail Date: 7/21/2010
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as obvious over Ridland et al. (EP 0 812 818 A1).

Regarding claims 1 and 6

Ridland teaches a catalyst comprising the reaction product an orthoester or condensed orthoester of metal such as titanium or zirconium, an alcohol containing at least two hydroxyl groups, a 2-hydroxy acid and a base (abstract).

Although, Ridland does not teach that the ratio of equivalents of base to equivalents of acid is .0.0033-0.2:1, Ridland does teach "Frequently the amount of base used is sufficient to fully neutralize the 2-hydroxy carboxylic acid but it is not essential that the acid be fully neutralized. Therefore, for monobasic 2-hydroxy acids such as

lactic acid, the preferred amount of base is in the range 0.8 to 1.2 mole per mole of 2-hydroxy acid", which shows using less than 1:1. We can calculate that 0.8 moles of base to 1.0 moles of citric acid, will produce base equivalent to acid equivalent as low as 0.27:1, which is greater than the maximum amount of 0.2:1 of the instant invention. However, the amount of base used would have been determined through routine experimentation in the art, absent any evidence of unexpected result or criticality for the specifically claimed range. It is noted that the reference teaches that when a tribasic acid such as citric acid is used the preferred amount of base is 1 to 3 moles per mole of acid, which still allows for an equivalent ratio of 0.33:1. It is also noted that a reference is good for all that it teaches, and is not limited to the preferred embodiments.

Regarding claim 2

Ridland teaches diethylene glycol (page 3, first full paragraph).

Regarding claim 3

Ridland teaches the use of lactic acid (page 3, fourth full paragraph).

Regarding claim 4

Ridland teaches the use of 1 to 4 moles of acid per mole of metal (page 3, third full paragraph).

Regarding claim 5

Ridland teaches the use of sodium hydroxide (page 3, fourth full paragraph).

Regarding claim 17

Ridland teaches the use of citric acid (see above).

Regarding claim 18

Ridland teaches the use of sodium hydroxide (see above).

Response to Arguments

Applicants argue against the 103 rejection over Ridland.

Applicants argue that Ridland does not teach the limitation of the amended claim where the ratio of equivalents of base to equivalents of acid is in the range 0.0033-0.2:1. While it is true that Ridland does not explicitly teach this ratio, Ridland does teach that the acid need not be fully neutralized, and suggest ratios of equivalents as low as 0.33:1 and/or 0.27:1 (see above), and the claimed amount would have been obvious based on the reasoning given above, as applicants have provided no evidence of criticality or unexpected results for the claimed invention relative to the closest prior art.

Applicants argue against the obviousness double patenting rejection.

These arguments are persuasive and therefore the rejection has been withdrawn.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES E. MCDONOUGH whose telephone number is (571)272-6398. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J.A. LORENZO/
Supervisory Patent Examiner, Art Unit 1793

/James E McDonough/
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